

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership Publications/Services Standards Conferences Careers/Jobs

IEEE Xplore
 RELEASE 1.8

 Welcome
 United States Patent and Trademark Office

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)

Quick Links

» Adva

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced
- ☐ CrossRef

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Try our New Full-text Search Prototype **GO**[Help](#)

- 1) Enter a single keyword, phrase, or Boolean expression.
Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
- 2) Limit your search by using search operators and field codes, if desired.
Example: optical <and> (fiber <or> fibre) <in> ti
- 3) Limit the results by selecting Search Options.
- 4) Click Search. See [Search Examples](#)

 (detect or determine)and
 (face or facial or nose or
 eyes or mouth or lips)and
 (neutral or non <near/5>

Start Search

Clear

Note: This function returns plural and suffixed forms of the keyword(s).

 Search operators: <and> <or> <not> <in> [More](#)

 Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) [More](#)

Search Options:

Select publication types:

- ☒ IEEE Journals
- ☒ IEE Journals
- ☒ IEEE Conference proceedings
- ☒ IEE Conference proceedings
- ☒ IEEE Standards

Select years to search:

 From year: to

Organize search results by:

Sort by: In: orderList Results per page
[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE


[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)
IEEE Xplore
 RELEASE 1.8

 Welcome
 United States Patent and Trademark Office

[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)
[Quick Links](#)

» Se

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced
- ☐ CrossRef

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

 Your search matched **2** of **1099723** documents.

 A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

☐ Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

1 Recognizing facial actions using Gabor wavelets with neutral face average difference
Bazzo, J.J.; Lamar, M.V.;

Automatic Face and Gesture Recognition, 2004. Proceedings. Sixth IEEE International Conference on , 17-19 May 2004

Pages:505 - 510

[\[Abstract\]](#)
[\[PDF Full-Text \(1478 KB\)\]](#)
IEEE CNF
2 A feature space for face image processing
Qing Song; Robinson, J.;

Pattern Recognition, 2000. Proceedings. 15th International Conference on , Volume: 2 , 3-7 Sept 2000

Pages:97 - 100 vol.2

[\[Abstract\]](#)
[\[PDF Full-Text \(864 KB\)\]](#)
IEEE CNF

Print Format

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership Publications/Services Standards Conferences Careers/Jobs

IEEE Xplore
 RELEASE 1.8

 Welcome
 United States Patent and Trademark Office

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)

» ABS

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced
- ☐ CrossRef

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

[Search Results](#) [\[PDF FULL-TEXT 864 KB\]](#) [PREV](#) [DOWNLOAD CITATION](#)

 Request Permissions
RIGHTS LINK
Copyright Clearance Center, Inc.

A feature space for face image processing

[Qing Song](#) [Robinson, J.](#)

Fac. of Eng. & Appl. Sci., Memorial Univ. of Newfoundland, St. John's, Nfld., C

This paper appears in: Pattern Recognition, 2000. Proceedings. 15th Int Conference on

Meeting Date: 09/03/2000 - 09/07/2000

Publication Date: 3-7 Sept 2000

Location: Barcelona Spain

On page(s): 97 - 100 vol.2

Volume: 2

Reference Cited: 7

Number of Pages: 4 vol(xxxi+1134+xxxiii+1072+1152+xxix+881)

Inspec Accession Number: 6887413

Abstract:

We propose criteria for a feature space for **face** image processing and a method for generating such a space. Beginning with many input dimensions, including deformation vectors (obtained through optical flow analysis between an input image and a template) and deformation residues, we apply principal components analysis and **classification** criterion to derive a feature space. We demonstrate **classification** important tasks-**face detection** and expression analysis-in each case using a linear discriminant, thereby demonstrating that the feature space fulfills a rest version of the criteria

Index Terms:

[face recognition](#) [image classification](#) [image sequences](#) [principal component analysis](#) [classification criterion](#) [deformation residues](#) [deformation vectors](#) [expression analysis](#) [detection](#) [face image processing](#) [feature space](#) [linear discriminant](#) [optical flow analysis](#)

Documents that cite this document

There are no citing documents available in IEEE Xplore at this time.

[Search Results](#) [\[PDF FULL-TEXT 864 KB\]](#) [PREV](#) [DOWNLOAD CITATION](#)

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership Publications/Services Standards Conferences Careers/Jobs

IEEE Xplore
 RELEASE 1.8

 Welcome
 United States Patent and Trademark Office

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)

» ABS

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced
- ☐ CrossRef

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

[Search Results](#) [PDF FULL-TEXT 1478 KB] [NEXT](#) [DOWNLOAD CITATION](#)


Recognizing facial actions using Gabor wavelets with neutral face average difference

Bazzo, J.J. Lamar, M.V.

Dept. of Electr. Eng., Fed. Univ. of Parana, Curitiba, Brazil

This paper appears in: Automatic Face and Gesture Recognition, 2004. Proceedings. Sixth IEEE International Conference on

Publication Date: 17-19 May 2004

On page(s): 505 - 510

ISSN:

Number of Pages: xvii+904

Inspec Accession Number: 8143031

Abstract:

This work describes a new pre-processing step to classify **facial** expression. Previous works suggest that Gabor wavelets applied to recognize **facial** expression images subtracted from **neutral face** from the same subject could achieve good results under controlled condition as eye and mouth alignment. We propose a recognition system where the Gabor kernels are applied on **facial** expression subtracted from averaged **neutral face**. A fast pre-processing technique that generates a small dimension output data is also proposed. A correct recognition rate of 86.6% is achieved in a 7 upper **face** actions and 81.6% in a 7 lower **face** actions **detection** proposed by a neural network based classifier. The performance is evaluated in a heterogeneous subject database with head motion and lighting variations.

Index Terms:

emotion recognition face recognition neural nets principal component analysis wavelet transforms Gabor wavelets facial action recognition facial expression classification motion heterogeneous subject database neural network based classifier neutral face difference

Documents that cite this document

There are no citing documents available in IEEE Xplore at this time.

[Search Results](#) [PDF FULL-TEXT 1478 KB] [NEXT](#) [DOWNLOAD CITATION](#)